DOCKET NO.: NNI_0005_REDE_US02 PATENT

Application No.: 10/672,833 **Office Action Dated:** July 5, 2011

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A <u>eircuit pad_system</u> for reducing discomfort caused by a magnetic stimulation device, <u>the system comprising</u>:

a magnetic stimulation device;

a circuit pad;

at least one conductor <u>located on the circuit pad and</u> capable of being used with <u>the a-magnetic stimulation</u> device, wherein the conductor is adapted to reduce stimulation induced by the magnetic stimulation device, and.

a connector in communication with the conductor, wherein the connector provides an interface with to the magnetic stimulation device.

- 2. (Currently Amended) The <u>circuit pad system</u> of claim 1, further comprising a circuit in communication with the conductor.
- 3. (Currently Amended) The <u>circuit pad system</u> of claim 1, further comprising reducing stimulation by the magnetic stimulation device at a predetermined location.
- 4. (Currently Amended) The <u>circuit pad system</u> of claim 3, wherein the predetermined location is determined relative to a treatment area.
- 5. (Currently Amended) The <u>eircuit pad system</u> of claim 4, wherein the treatment area is a portion of a brain and wherein the predetermined location is a cutaneous-proximate area relative to the treatment area.
 - 6. (Canceled)

Application No.: 10/672,833 **Office Action Dated:** July 5, 2011

7. (Currently Amended) The <u>eireuit pad system</u> of claim 1, further comprising a

PATENT

disposal mechanism that renders the circuit pad inoperable.

8. (Currently Amended) The eircuit pad system of claim 7, wherein the disposal

mechanism acts automatically upon removal from a patient.

9. (Currently Amended) The <u>circuit pad system</u> of claim 7, wherein the disposal

mechanism is activated by a user of the circuit pad.

10. (Currently Amended) The eircuit pad system of claim 7, wherein the disposal

mechanism changes the physical and electrical properties of the conductor.

11. (Currently Amended) The eireuit pad system of claim 7, wherein the disposal

mechanism disconnects communication between the conductor and the circuit.

12. (Currently Amended) The eireuit pad system of claim 7, wherein the disposal

mechanism is activated after a predetermined number of uses.

13. (Currently Amended) The eircuit pad system of claim 7, wherein the disposal

mechanism permits a certain patient to use the circuit pad for a predetermined period.

14. (Currently Amended) The circuit pad system of claim 13, wherein the

predetermined period is a function of a number of uses.

15. (Currently Amended) The eireuit pad system of claim 13, wherein the

predetermined period is a function of a number of a duration of time.

Page 3 of 15

Application No.: 10/672,833

Office Action Dated: July 5, 2011

16. (Currently Amended) The <u>circuit pad</u> <u>system</u> of claim 7, wherein the disposal

PATENT

mechanism destroys the circuit pad upon removal from the patient.

17. (Currently Amended) The eireuit pad system of claim 7, wherein the disposal

mechanism is constructed of materials that cannot be sanitized.

18. (Currently Amended) The circuit pad system of claim 7, wherein the circuit pad

is adapted to become inoperable when contacted with cleaning materials.

19. (Currently Amended) The circuit pad system of claim 7, wherein the circuit pad

is constructed of materials that disintegrate when in contact with cleaning solutions.

20. (Currently Amended) The circuit pad system of claim 1, wherein the circuit pad

is adapted to be attached to the patient.

21. (Currently Amended) The circuit pad system of claim 1, wherein the circuit pad

is adapted to be attached to the magnetic stimulation device.

22. (Currently Amended) The eircuit pad system of claim 1, wherein the circuit pad

comprises an adhesive.

23. (Currently Amended) The eireuit pad system of claim 1, wherein the conductor is

a flat metallic device.

24. (Currently Amended) The eircuit pad system of claim 23, wherein the conductor

is located between two surfaces of the circuit pad.

Page 4 of 15

Application No.: 10/672,833 **Office Action Dated:** July 5, 2011

25. (Currently Amended) The eireuit pad system of claim 1, wherein the conductor

PATENT

has an area of in the range of 1 centimeter² to 40 centimeter².

26. (Currently Amended) The circuit pad system of claim 1, wherein the reducing of

the stimulation occurs by reducing magnetic flux density created by the magnetic stimulation

device.

27. (Currently Amended) The eircuit pad system of claim 1, wherein the reducing of

the stimulation occurs by superimposing a magnetic field created by the conductors on the circuit

pad and a magnetic field created by the magnetic stimulation device.

28. (Currently Amended) The eircuit pad system of claim 1, wherein the conductor is

provided electrical energy substantially simultaneously with electrical energy provided to the

magnetic stimulation device.

29. (Currently Amended) The eireuit pad system of claim 28, wherein the electrical

energy provided to the conductor and the electrical energy provided to the magnetic stimulation

device are of opposite polarity.

30. (Currently Amended) The eireuit pad system of claim 28, wherein the electrical

energy provided to the conductor is a current that is derived from a voltage provided to the

magnetic stimulation device.

31. (Currently Amended) The eircuit pad system of claim 1, wherein the circuit pad

is adapted to receive a conductive gel that facilitates communication between the circuit pad and

a treatment area.

Application No.: 10/672,833 **Office Action Dated:** July 5, 2011

32. (Currently Amended) The eircuit pad system of claim 31, wherein the conductive

PATENT

gel is received by an absorbent portion of the circuit pad.

33. (Currently Amended) The eircuit pad system of claim 32, wherein the absorbent

portion of the circuit pad comprises a sponge material.

34. (Currently Amended) The eircuit pad system of claim 31, wherein the conductive

gel is located within a plastic material on the circuit pad.

35. (Currently Amended) The eireuit pad system of claim 1, wherein the conductor is

placed substantially orthogonal to an electric field vector created by the magnetic stimulation

device.

36. (Currently Amended) The eircuit pad system of claim 1, wherein the conductor

has rounded edges.

37. (Currently Amended) The eireuit pad system of claim 1, wherein the conductor

has a high aspect ratio.

38. (Currently Amended) The eireuit pad system of claim 1, wherein a relatively

longer dimension of the conductor is placed along a similar direction as an electric field vector

induced by the magnetic stimulation device.

39. (Currently Amended) The circuit pad system of claim 1, wherein the conductor is

arc-shaped.

40. (Currently Amended) The circuit pad system of claim 1, further comprising

insulating material for preventing undesired electrical conduction with the circuit pad.

Application No.: 10/672,833 **Office Action Dated:** July 5, 2011

PATENT

41. (Currently Amended) The circuit pad system of claim 1, wherein the circuit pad

is constructed of a flexible material.

42. (Currently Amended) The eircuit pad system of claim 1, wherein the circuit pad

is constructed, at least in part, by materials including at least one of the following: plastic, mylar,

or polyester.

43. (Currently Amended) The eircuit pad system of claim 1, wherein the magnetic

stimulation device comprises a magnetic core that saturates at 0.5 Tesla or greater.

44. (Currently Amended) A method for treating a patient using transcutaneous

magnetic stimulation, comprising:

directing a magnetic field created by a magnetic stimulation device to a treatment

area on the patient;

applying a flexible circuit pad, wherein the flexible circuit pad comprises at least

one conductor adapted to reduce stimulation induced by the magnetic stimulation device and a

connector in communication with the at least one conductor, the connector providing an interface

with the magnetic stimulation device; and

treating the patient with the magnetic field.

45. (Original) The method of claim 44, wherein the magnetic stimulation device

comprises a magnetic core that saturates at 0.5 Tesla or greater.

46. (Original) The method of claim 44, further comprising applying the flexible

circuit pad to the treatment area.

Application No.: 10/672,833 **Office Action Dated:** July 5, 2011

47. (Original) The method of claim 44, further comprising applying the flexible circuit pad to the magnetic stimulation device.

PATENT

48. (Original) The method of claim 44, wherein the magnetic stimulation device

comprises a magnetic core with a non-toroidal geometry.

49. (Original) The method of claim 44, wherein the conductor reduces stimulation of

a cutaneous-proximate area on the patient.

50. (Original) The method of claim 44, further comprising locating the magnetic

stimulation device to the treatment area on the patient.

51. (Original) The method of claim 44, further comprising applying the flexible

circuit pad to the patient.

52. (Original) The method of claim 44, further comprising applying a conductive gel

material between the flexible circuit pad and the patient.

53. (Original) The method of claim 44, further comprising insulating the flexible

circuit pad from undesired electrical conduction.

54. (Original) The method of claim 44, further comprising activating a disposal

mechanism that renders the flexible circuit pad inoperable.

55. (Original) The method of claim 54, wherein the activating of the disposal

mechanism occurs after the patient is treated with the magnetic field.

Application No.: 10/672,833 **Office Action Dated:** July 5, 2011

56. (Original) The method of claim 54, further wherein the activating of the disposal

PATENT

mechanism occurs automatically upon removal from a patient.

57. (Original) The method of claim 54, wherein activating of the disposal mechanism

is conducted by a user of the flexible circuit pad.

58. (Original) The method of claim 54, wherein the activating of the disposal

mechanism comprises changing the physical and electrical properties of the conductor.

59. (Original) The method of claim 54, wherein the activating of the disposal

mechanism comprises disconnecting communication with the flexible circuit pad.

60. (Original) The method of claim 54, wherein the activating of the disposal

mechanism occurs after a predetermined number of uses.

61. (Original) The method of claim 44, further comprising adapting the flexible

circuit pad to be attached to the patient.

62. (Original) The method of claim 44, further comprising adapting the flexible

circuit pad to be attached to the magnetic stimulation device.

63. (Original) The method of claim 44, further comprising applying an adhesive to

the flexible circuit pad.

64. (Original) The method of claim 44, further comprising providing a conductive

gel that facilitates communication with the flexible circuit pad.

Application No.: 10/672,833 **Office Action Dated:** July 5, 2011

65. (Original) The method of claim 44, further comprising injecting a conductive gel that facilitates communication with the flexible circuit pad.

PATENT

- 66. (Previously Presented) The method of claim 44, wherein the circuit pad is constructed, at least in part, by materials including at least one of the following: plastic, mylar, or polyester.
- 67. (Currently Amended) A <u>eircuit pad system</u> for reducing discomfort caused by a magnetic stimulation device, <u>the system</u> comprising:

a magnetic stimulation device for generating therapeutic magnetic stimulation at a first location;

a ferrite material <u>for reducing stimulation on a patient</u>, wherein the ferrite material <u>offsets</u> a magnetic field generated by the magnetic stimulation device <u>capable of being used with the</u> magnetic stimulation device, wherein the ferrite material is adapted to reduce stimulation induced by the magnetic stimulation device at a second location; and

a connector in communication with the ferrite material, wherein the connector provides an interface with to the magnetic stimulation device.

- 68. (Currently Amended) The <u>eircuit pad</u> <u>system</u> of claim 67, further comprising a circuit in communication with the ferrite material.
- 69. (Currently Amended) The <u>eircuit pad</u> <u>system</u> of claim 67, wherein the ferrite material is located between two surfaces of the circuit pad.